

**What is claim d is:**

1. A diagnosis support system for diabetes comprising:
  - a diagnostic data input unit for entering diagnostic data including clinical testing data and clinical findings of a patient;
  - 5 a pathophysiologic condition pattern analyzing unit for analyzing the pathophysiologic condition of diabetes of the patient by comparing the diagnostic data and predetermined criteria of analysis;
  - a diagnosis support information generating unit for  
10 generating diagnosis support information based on the diagnostic data and criteria of diagnosis predetermined for each analyzed pathophysiologic condition, and
  - a diagnosis support information output unit for outputting information obtained by the pathophysiologic condition pattern  
15 analyzing unit and the diagnostic information generating unit.
2. A diagnosis support system for diabetes according to Claim 1, wherein the pathophysiologic condition pattern analyzing unit comprises the criteria of analysis including determination of peripheral insulin resistance, determination of hepatic glucose  
20 production, determination of glucose toxicity as a result of being subjected to hyperglycemia for a long time, and determination of decrease of insulin secretion, and analyses the pathophysiologic condition of diabetes by calculating evaluation values obtained from each criterion of analysis, and comparing the obtained evaluation  
25 values.

3. A diagnosis support system for diabetes according to Claim 2, wherein the diagnosis support information generating unit generates diagnosis support information for treatment of the patient using the criteria of diagnosis including a standard of treatment policy for the patient whose evaluation value of peripheral insulin resistance is the largest, a standard of treatment policy for the patient whose evaluation value of hepatic glucose production is the largest, a standard of treatment policy for the patient whose evaluation value of glucose toxicity as a result of being subjected to hyperglycemia for a long time is the largest, and a standard of treatment policy for the patient whose evaluation value of decrease of insulin secretion is the largest.

4. A diagnosis support system for diabetes according to Claim 2 or 3, wherein the diagnosis support information generated by the diagnosis support information generating unit includes information on the analyzed pathophysiologic condition including the evaluation value and information on exercise therapy, dietetic therapy, and medicinal treatment.

5. A diagnosis support system for diabetes according to Claim 1, further comprising:

a biomodel generating unit for generating a biomodel by estimating a patient-specific biological parameter of diabetes using the entered diagnostic data and information on the pathophysiologic condition analyzed by the pathophysiologic condition pattern analyzing unit, and

a pathophysiologic condition simulation unit for estimating the pathophysiologic condition after treatment by giving the generated biomodel a predetermined treatment based on a virtual treatment policy in a simulating manner.

5 6. A diagnosis support program for diabetes for allowing a computer to implement a diagnostic data input function for allowing input of diagnostic data including clinical testing data and clinical findings of a patient, a pathophysiologic condition pattern analyzing function for analyzing the pathophysiologic condition of diabetes of  
10 the patient by comparing the diagnostic data and predetermined criteria of analysis, a diagnosis support information generating function for generating diagnosis support information by using the diagnostic data and criteria of diagnosis predetermined for each analyzed pathophysiologic condition, and a diagnosis support  
15 information output function for outputting information obtained by the pathophysiologic condition pattern analyzing function and the diagnostic information generating function.

7. A diagnosis support program for diabetes according to Claim 6, wherein the pathophysiologic condition pattern analyzing function  
20 comprises the criteria of analysis including determination of peripheral insulin resistance, determination of hepatic glucose production, determination of glucose toxicity as a result of being subjected to hyperglycemia for a long time, and determination of decrease of insulin secretion, and analyses the pathophysiologic  
25 condition of diabetes by calculating evaluation value obtained from

each criterion of analysis, and analysis, and comparing the obtained evaluation values.

8. A diagnosis support program for diabetes according to Claim 7, wherein the diagnosis support information generating function  
5 generates diagnosis support information for treatment of the patient using the criteria of diagnosis including a standard of treatment policy for the patient whose evaluation value of peripheral insulin resistance is the largest, a standard of treatment policy for the patient whose evaluation value of hepatic glucose production is the  
10 largest, a standard of treatment policy for the patient whose evaluation value of glucose toxicity as a result of being subjected to hyperglycemia for a long time is the largest, and a standard of treatment policy for the patient whose evaluation value of decrease of insulin secretion is the largest.

15 9. A diagnosis support program for diabetes according to Claim 7 or 8, wherein the diagnosis support information generated by the diagnosis support information generating function includes information on the analyzed pathophysiologic condition including the evaluation value and information on exercise therapy, dietetic  
20 therapy, and medicinal treatment.

10. A diagnosis support program for diabetes according to Claim 6, further comprising:

a biomodel generating function for generating a biomodel by estimating a patient-specific biological parameter of diabetes using  
25 the entered diagnostic data and information on the pathophysiologic

condition analyzed by the pathophysiologic condition pattern analyzing function, and

5 a pathophysiologic condition simulation function for estimating the pathophysiologic condition after treatment by giving the generated biomodel a predetermined treatment based on a virtual treatment policy in a simulating manner.

11. A diagnosis method of a diagnosis support system for diabetes comprising:

10 a diagnostic data input step for entering diagnostic data including clinical testing data and clinical findings of a patient;

a pathophysiologic condition pattern analyzing step for analyzing the pathophysiologic condition of diabetes of the patient by comparing the diagnostic data and predetermined criteria of analysis;

15 a diagnosis support information generating step for generating diagnosis support information based on the diagnostic data and criteria of diagnosis predetermined for each analyzed pathophysiologic condition, and

20 a diagnosis support information output step for outputting information obtained by the pathophysiologic condition pattern analyzing step and the diagnostic information generating step.

12. A diagnosis method of a diagnosis support system for diabetes according to Claim 11, wherein the pathophysiologic condition pattern analyzing step comprises the criteria of analysis  
25 including determination of peripheral insulin resistance,

determination of hepatic glucose production, determination of glucose toxicity as a result of being subjected to hyperglycemia for a long time, and determination of decrease of insulin secretion, and analyses the pathophysiologic condition of diabetes by calculating evaluation values obtained from each criterion of analysis, and  
5 comparing the obtained evaluation values.

13. A diagnosis method of a diagnosis support system for diabetes according to Claim 12, wherein the diagnosis support information generating step generates diagnosis support information  
10 for treatment of the patient using the criteria of diagnosis including a standard of treatment policy for the patient whose evaluation value of peripheral insulin resistance is the largest, a standard of treatment policy for the patient whose evaluation value of hepatic glucose production is the largest, a standard of treatment policy for  
15 the patient whose evaluation value of glucose toxicity as a result of being subjected to hyperglycemia for a long time is the largest, and a standard of treatment policy for the patient whose evaluation value of decrease of insulin secretion is the largest.

14. A diagnosis method of a diagnosis support system for  
20 diabetes according to Claim 12 or 13, wherein the diagnosis support information generated by the diagnosis support information generating step includes information on the analyzed pathophysiologic condition including the evaluation value and information on exercise therapy, dietetic therapy, and medicinal  
25 treatment.

15. A diagnosis method of a diagnosis support system for diabetes according to Claim 11, further comprising:

5 a biomodel generating step for generating a biomodel by estimating a patient-specific biological parameter of diabetes using the entered diagnostic data and information on the pathophysiologic condition analyzed by the pathophysiologic condition pattern analyzing step, and

10 a pathophysiologic condition simulation step for estimating the pathophysiologic condition after treatment by giving the generated biomodel a predetermined treatment based on a virtual treatment policy in a simulating manner.